

FIELD CROP ABSTRACTS

Vol. 10, Nos. 1, 2, 3 and 4
and Annual Indexes
1957

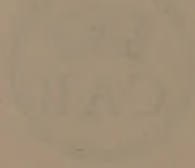


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FIELD CROP ABSTRACTS

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FIELD CROP ABSTRACTS

The subscription rate (post free) for *Field Crop Abstracts* Volume 10, 1957 (4 issues), is 50s. sterling (in U.S.A. and Canada \$7.00), with 20% discount for subscribers (non-trade) in the British Commonwealth and the Republics of Sudan and Ireland, who send their orders direct to the Commonwealth Agricultural Bureaux, Central Sales Branch, Farnham Royal, Bucks, England. No discount is allowed on earlier volumes.

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HERBAGE ABSTRACTS

The subscription rate for *Herbage Abstracts* is the same as for *Field Crop Abstracts*. *Herbage Abstracts*, issued quarterly, presents, in condensed form, the world's current scientific literature on grasslands, fodder crops and their management. A specimen copy will be sent on request.

The chief aim of this Bureau is to abstract all published results of current scientific research on annual field crops, herbage and fodders, and to make these abstracts available through our two quarterly journals, *Field Crop Abstracts* and *Herbage Abstracts*. To achieve this aim, the Bureau staff maintains a constant scrutiny of approximately 1000 periodicals, reports and occasional publications which reach us from more than 75 countries. A list of these periodicals and reports examined was published in February, 1956, bound in with *Field Crop Abstracts* Vol. 9, No. 1. A supplementary list appeared in *Field Crop Abstracts*, Vol. 10, No. 1. The Bureau is always seeking to expand its coverage and suggestions for suitable additions to these lists will be appreciated. All scientific publications relating to annual field crops, herbage and fodder crops, particularly special reports and advance copies of papers, are required so that they may be abstracted and their contents made known to our readers with the minimum delay. *Field Crop Abstracts*, now in its 10th year, has a world-wide circulation.

Translations are not undertaken by the Bureau, neither can publications other than reprints be loaned, but arrangements can be made with an outside agency to supply photostat or microfilm copies at cost price.

Suggestions for review articles, or comments on those published in the journals, are invited.

The Director is always pleased to receive comments on *Field Crop Abstracts* and any suggestions for its improvement.

Where † follows the number which appears before the title of an abstract, it indicates that the abstract, or book review, is also reproduced in *Herbage Abstracts*.

The locality shown in square brackets in the Title Heading indicates where the work reported was carried out.

For abstracts dealing with plantation crops, including sisal, sugar-cane and tobacco, see *Horticultural Abstracts*.

CORRECTION NOTICE

The following essential correction should be made to line 9 of Abstract No. 587 of Vol. 10, No. 2 :

For ' typical ' substitute ' atypical '.

FIELD CROP ABSTRACTS

SUMMARY OF CONTENTS

VOL. 10, Nos. 1, 2, 3 and 4, 1957

REVIEW ARTICLES

	PAGE
Wild oats.	C. V. Dadd ... 1
Light climate and crop growth in Finland.	O. Pohjakallio ... 77
Disease-resistance in sorghum and the Quelea problem.	H. Doggett. ... 153

TRANSLATION

Monogerm sugar-beet.	N. I. Orlovskii ... 221
----------------------	-------------------------

ABSTRACT SECTION

FIELD CROPS (ANNUAL)	PAGES		PAGES
Cereals ...	11, 83, 157, 225	LAND USE, SURVEYS and MANAGEMENT ...	53, 130, 200, 264
Wheat		FARMING SYSTEMS and PRACTICES ...	54, 131, 201, 265
Buckwheat		SOIL and WATER CONSERVATION ...	56, 202, 266
Oats		WEEDS, WEED CONTROL and WEEDKILLERS ...	57, 133, 203, 266
Rye		CROP BOTANY ...	59, 136, 207, 273
Barley		AGRICULTURAL METEOROLOGY and CLIMATOLOGY ...	276
Maize		MISCELLANEOUS ...	61, 139, 210, 277
Sweet-corn		REPORTS ...	63, 141, 211, 279
Millet and sorghum		BOOKS ...	71, 148, 216, 281
Rice		NEWS ITEMS and NOTES ...	74, 151, 219, 284
General		ANNUAL SUBJECT INDEX ...	287
Legumes ...	33, 109, 180, 243	ANNUAL AUTHOR INDEX ...	321
Cowpeas			
Soybeans			
Groundnuts			
Peas			
Beans			
Lupins			
Bambara groundnuts			
General			
Roots ...	35, 114, 184, 248		
Sugar-beet			
Fodder-beet			
Swede-turnips			
Potatoes			
Sweet-potatoes			
Cassava and yams			
Cocoyams			
Fibre crops ...	47, 123, 194, 259		
Cotton			
Flax			
Hemp			
Jute			
Kenaf			
Oil Crops ...	51, 128, 198, 263		
Linseed			
Safflower			
Sunflower			
Rape			
General			

Supplement to *List of Periodicals and Reports Examined* ... No. 1, p. vii

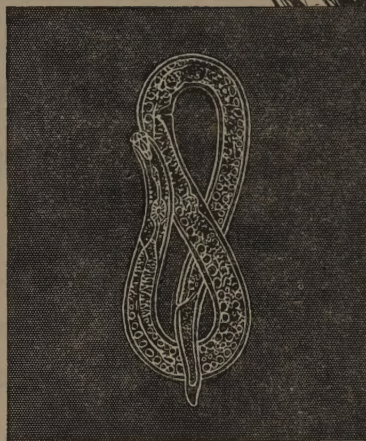
Pineapple... plus

The rich soil of Hawaii, watered by tropic rains, warmed by Pacific sunshine, sheltered from the trade winds by hedges of scented blossom, is perfect for growing pineapples. Or rather, *was*.

For at one time the islands seemed cursed. Whole plantations of the golden-fleshed fruit began to fail. Acre after acre withered and drooped. Hawaii's major crop seemed doomed, for the known cause—a species of nematode—appeared immune to every pesticide the islanders could afford. Until Shell D-D Soil Fumigant arrived.

D-D was injected into the soil of 840 plots in 14 plantations, and at harvest-time Hawaii smiled again. For wherever this Shell-developed pesticide had been used, the plants were restored to full vigour and bore fine, healthy fruit. And—even more amazing—D-D brought a Pineapple *plus* to Hawaii. Land which previously had yielded 12 tons per acre now produced 40 tons—no mean gain on 50,000 acres.

Small wonder that, in the eyes of Hawaiian growers, D-D has earned the biggest *lei* of all.



D-D

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SUPPLEMENT

TO

LIST OF PERIODICALS AND REPORTS EXAMINED BY THE COMMONWEALTH BUREAU OF PASTURES AND FIELD CROPS *

FEBRUARY, 1957

TITLE	ABBREVIATION USED
AFRICA	
<i>Additions</i>	
Journal of the West African Science Association	<i>J. W. Afr. Sci. Ass.</i>
Report and Accounts. Tanganyika Agricultural Corporation	<i>Rep. Tanganyika agric. Corp.</i>
Report of the Council for Scientific and Industrial Research, South Africa	<i>Rep. CSIR</i>
Report of the Department of Agriculture. Northern Region of Nigeria	<i>Rep. Dep. Agric. N. Nigeria</i>
Report of the Henderson Research Station (8)	<i>Rep. Henderson Res. Sta.</i>
<i>Amendments</i>	
Report of the Department of Veterinary Science and Animal Husbandry. Tanganyika is now	
Report of the Veterinary Department. Tanganyika	<i>Rep. Vet. Dep. Tanganyika</i>
Report of the Director of Research and Specialist Services. Southern Rhodesia is now	
Report of the Secretary to the Federal Ministry of Agriculture. Rhodesia and Nyasaland	<i>Rep. Fed. Minist. Agric. Rhod. and Nyasaland</i>
AUSTRALIA	
<i>Additions</i>	
Australian Agricultural Newsletter	<i>Aust. agric. Newslett.</i>
Australian Journal of Chemistry (8)	<i>Aust. J. Chem.</i>
Report of the Department of Agriculture. Tasmania	<i>Rep. Dep. Agric. Tasm.</i>
Report of the Soil Conservation Authority. Victoria	<i>Rep. Soil Conserv. Auth., Vict.</i>
Report of the University of Sydney, School of Agriculture	<i>Rep. Sydney Univ. Sch. Agric.</i>
South Pacific	<i>S. Pacif.</i>
Wildlife Research	<i>Wildl. Res.</i>
<i>Amendments</i>	
Australian Journal of Science now incorporates	<i>Aust. J. Sci.</i>
Proceedings of the Australian and New Zealand Association for the Advancement of Science	
Australian Journal of Scientific Research. Series B is now	
Australian Journal of Biological Science	<i>Aust. J. biol. Sci.</i>

* Published in February, 1956, bound in with *Field Crop Abstracts* Vol. 9, No. 1.

AUSTRIA

Amendment

Versuchsergebnisse der Bundesanstalt für Alpine Landwirtschaft,
Admont
is now published in Gumpenstein.

VersErgebn. Bundesanst. alp. Landw., Gumpenstein

CANADA

Additions

Contributions de l'Institut Botanique de l'Université de Montréal
Proceedings of the Western Canadian Weed Control Conference
Progress Report of the Dominion Experimental Farm. British
Colombia
Progress Report of the Cereal Breeding Laboratory. Winnipeg
Research Review

Contr. Inst. bot. Univ. Montréal
Proc. W. Canad. Weed Contr. Conf.

Prog. Rep. Dom. exp. Fm., B.C.
Prog. Rep. Cereal Breed. Lab. Winnipeg
Res. Rev.

CEYLON

Additions

Ceylon Journal of Science. Section A. Botany (8)
Ceylon Journal of Science. Section B. Zoology (8)

Ceylon J. Sci. Sect. A
Ceylon J. Sci. Sect. B

CZECHOSLOVAKIA

Addition

Vědecké Práce

Vědecké Práce

EGYPT

Addition

Bulletin de l'Institut du Désert d'Egypte

Bull. Inst. Désert Egypte

FINLAND

Addition

Suomen Laidunyhdistyksen Vuosikirja

Suom. Laidunyhdist. Vuosik.

GERMANY

Additions

Angewandte Pflanzensoziologie
Mitteilungen der Bayerischen Landesanstalt für Tierzucht in
Grub (8)
Naturwissenschaften (*)
Praktische Blätter für Pflanzenbau und Pflanzenschutz
Zeitschrift für Botanik (*)
Zeitschrift für Landwirtschaftliche Versuchs- und Untersuchungs-
wesen, Rostock
Zeitschrift für Pflanzenzüchtung (5)

Angew. Pflsoziol.

Mitt. bayer. Landesanst. Tierzucht Grub
Naturwissenschaften
Prakt. Bl. PflBau
Z. Bot.

Z. landw. Versuchs- u. Untersuchwes. Rostock
Z. Pflzücht.

GERMANY (*Continued*)*Amendments*

Landwirtschaftliches Jahrbuch für Bayern
is now
Bayerisches Landwirtschaftliches Jahrbuch
and incorporates
Zeitschrift für Pflanzenbau und Pflanzenschutz

Bayer. landw. Jahrb.

GREAT BRITAIN

Additions

Agricultural History Review (8)
British Veterinary Journal (8)
Commonwealth Phytopathological News
Experimental Husbandry (8)
Farming Review (8)
Institute of Meat Bulletin (8)
Journal of Agricultural Engineering Research (8)
Journal of the Yorkshire Agricultural Society (8)
Laden Wain (8)
Outlook on Agriculture
Parasitology. Cambridge (8)
Pesticide Abstracts and News Summary. Section C
Proceedings of the British Weed Control Conference
Proceedings of the Royal Society. Section B (8)
Proceedings of the Royal Society of Edinburgh. Section B(7)
Report of the Barley Committee. European Brewery Convention
Report of the National Institute of Agricultural Engineering (8)
Report of the Nottingham University School of Agriculture (8)
Report of the Overseas Food Corporation
Report of the States Experimental Station. Jersey
Report of Trial and Experimental Work. Throws, Little Dunmow
Research and Experimental Record. Ministry of Agriculture.
Northern Ireland
Shell Magazine
Sports Turf Bulletin
Weed Abstracts
Yearbook of the Association of the Green Crop Driers (8)

Agric. History Rev.
Brit. vet. J.
Commonw. phytopath. News
Exp. Husb.
Fmg Rev.
Inst. Meat Bull.
J. agric. Engng Res.
J. Yorks agric. Soc.
Laden Wain
Outlook on Agric.
Parasitology, Camb.
Pest. Abstr. Sect. C
Proc. Brit. Weed Contr. Conf.
Proc. roy. Soc. Sect. B
Proc. roy. Soc. Edinb. Sect. B
Rep. Barley Cttee Europ. Brew. Conv.
Rep. NIAE
Rep. Notts Univ. Sch. Agric.
Rep. Overseas Fd Corp.
Rep. States exp. Sta., Jersey
Rep. exp. Wk. Throws.

Res. exp. Rec. Minist. Agric. N. Ire.
Shell Mag.
Sports Turf Bull.
Weed Abstr.
Yearb. Ass. Green Crop Driers

Amendment

Power Farmer
is now
Practical Power Farming

Prac. Pwr Fmg

HAWAII

Addition

Hawaii Farm Science

Hawaii Fm Sci.

INDIA

Additions

Report of the Bose Research Institute (8)
Report of the Central Jute Committee
Transactions of the Bose Research Institute

Rep. Bose Res. Inst.
Rep. cent. Jute Cttee
Trans. Bose Res. Inst.

INTERNATIONAL

Additions

Babel. International Journal of Translations
 Fatis Review (OEEC)
 Quarterly Bulletin of the International Association of Agricultural
 Librarians and Documentalists

Babel
Fatis Rev.
Quart. Bull. internat. Ass. agric. Lib. Document.

ISRAEL

Amendment

Bulletin of the Research Council. Israel. Section D
 now incorporates
 Palestine Journal of Botany. Rehovot Series (2)

Bull. Res. Coun. Israel. Sect. D

ITALY

Addition

Maydica
 Sementi Elette

Maydica
Sementi elette

JAPAN

Additions

Bulletin of the Faculty of Agriculture. University of Miyazaki
 Memoirs of the Faculty of Agriculture. University of Miyazaki
 Soil and Plant Food

Bull. Fac. Agric. Miyazaki
Mem. Fac. Agric. Miyazaki
Soil Pl. Fd

Amendments

Proceedings of the Imperial Academy of Japan (8)
 is now
 Proceedings of the Japan Academy (8)
 Bulletin of the Yamagata Agricultural College
 is now
 Bulletin of the Yamagata University (Agricultural Science)

Proc. Japan Acad.
Bull. Yamagata Univ. (Agric. Sci.)

LEBANON

Addition

Etudes Agronomiques. Lebanon

Etudes agron., Lebanon

MADAGASCAR

Additions

Bulletin de Madagascar
 Memoirs de l'Institut Scientifique de Madagascar

Bull. Madagascar
Mem. Inst. sci. Madagascar

NETHERLANDS

Additions

Jaarverslaag. Stichting C.L.O. Centrale (8)	<i>Jaarversl. Sticht. C.L.O. Cent.</i>
Landbouwméchanisatie	<i>Landb Méchanisatie</i>
Nematologica (8)	<i>Nematologica</i>
Technische Berichten Peulvruchten Studie Combinatie	<i>Tech. Ber. Peulvrucht.</i>
Tijdschrift over Planterziekten (2)	<i>Tijdschr. PlZiekt.</i>
Verslag over de Landbouw in Nederland	<i>Versl. Landb. Ned.</i>

NEW ZEALAND

Additions

Agricultural Bulletin of the Canterbury Chamber of Commerce	<i>Agric. Bull. Canterbury (N.Z.)</i>
Proceedings of the Lincoln College Farms (8)	<i>Proc. Lincoln Coll. Fms</i>

PAKISTAN

Addition

Pakistan Journal of Scientific Research	<i>Pakist. J. sci. Res.</i>
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POLAND

Addition

Roczniki Nauk Rolniczych. Series 5	<i>Roczn. Nauk rol.</i>
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SOLOMON ISLANDS

Addition

Report of the Department of Agriculture, Solomon Islands	<i>Rep. Dep. Agric. Solomon Is.</i>
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ARGENTINA

SOUTH AND CENTRAL AMERICA

Amendment

Revista de la Facultad de Agronomía. Eva Perón is now	
Revista de la Facultad de Agronomía. La Plata	<i>Rev. Fac. Agron., La Plata</i>

BRAZIL

Additions

Archivos do Instituto Biológico. São Paulo 5	<i>Arch. Inst. biol., S. Paulo</i>
Revista Ceres	<i>Ceres, Minas Gerais</i>

BRITISH GUIANA

Addition

Report on the Meteorology of British Guiana	<i>Rep. Met. Brit. Guiana</i>
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SOUTH AND CENTRAL AMERICA (*Continued*)

DUTCH GUIANA

Addition

Jaarverslag Department van Landbouw, Veeteelt en Visserij.
Suriname

Jaarversl. Dep. Landb. Suriname

MEXICO

Addition

Agricultura técnica. México

Agricultura téc., Méx.

PERU

Addition

Técnica Agropecuaria

Téc. agropec.

URUGUAY

Addition

Revista Sudamericana de Botanica

Rev. sudamer. Bot.

VENEZUELA

Addition

Revista de la Facultad de Agronomía. Maracay

Rev. Fac. Agron., Maracay

SPAIN

Addition

Archivos del Instituto de Aclimatación

Arch. Inst. Aclim.

Amendment

Anales del Jardín Botánico de Madrid
is now

Anales del Instituto Botánico A. J. Cavanilles

An. Inst. bot. Cavanilles

SWITZERLAND

Addition

Communiqués de l'Association pour le Développement de la
Culture Fourragère

Commun. Ass. Dev. Cult. Fourrag.

U.S.A.

Additions

Cereal Science Today
Experimental Parasitology (8)
Idaho Agricultural Science
International Rice Yearbook
Journal of the American Statistical Association (8)
Journal of Applied Physics (8)
Journal of Economic Entomology (8)
Journal of Parasitology (8)

Cereal Sci. Today
Exp. Parasit.
Idaho agric. Sci.
Internat. Rice Yearb.
J. Amer. statist. Ass.
J. appl. Phys.
J. econ. Ent.
J. Parasit.

U.S.A. (Continued)

Maine Farm Research	<i>Maine Fm Res.</i>
Proceedings of the California Weed Conference	<i>Proc. Calif. Weed Conf.</i>
Proceedings of the Eastern Section National Weed Committee	<i>Proc. E. Sect. Nat. Weed Cttee</i>
Proceedings of the North Central Weed Control Conference	<i>Proc. N. Cent. Weed Contr. Conf.</i>
Proceedings of the Northeastern Weed Control Conference	<i>Proc. N.E. Weed Contr. Conf.</i>
Proceedings of the Southern Weed Control Conference	<i>Proc. S. Weed Contr. Conf.</i>
Report of the Carnegie Institute Department of Plant Biology	<i>Rep. Carneg. Inst.</i>
Report of the Maryland Agricultural Experiment Station	<i>Rep. Md agric. Exp. Sta.</i>
Report of the Rockefeller Foundation (8)	<i>Rep. Rockefeller Fdn</i>
Report of the Southern Indiana Forage Farm	<i>Rep. S. Ind. Forage Fm</i>
Research in Review	<i>Res. in Rev.</i>
South Dakota Farm and Home Research	<i>S. Dak. Fm Home Res.</i>
Vermont Home and Farm Research	<i>Vermont Home Fm Res.</i>
Veterinary Medicine (8)	<i>Vet. Med.</i>

Amendment

Proceedings of the American Society of Sugar Beet Technologists	
is now	
Journal of the American Society of Sugar Beet Technologists	<i>J. Amer. Soc. Sug. Beet Technol.</i>

U.S.S.R

Additions

Trudy Instituta Zemledelija	<i>Trudy Inst. Zemled. (Proc. Inst. Agric.)</i>
Životnovodstvo	<i>Životnovodstvo (Anim. Husb.)</i>

Amendment

Botaničeskii Žurnal. Kiev	
is now	
Ukraińskii Botaničnii Žurnal. Kiev	<i>Ukrain. Bot. Ž., Kiev. (Ukrain. J. Bot., Kiev).</i>

YUGOSLAVIA

Additions

Agronomski Glasnik	<i>Agronom. Glas.</i>
Arhiv Bioloških Nauka	<i>Arhiv biol. Nauk.</i>
Biljna Proizvodnja	<i>Biljna Proizvod.</i>
Poljoprivredna Znanstvena Smotra	<i>Poljopr. Znanstv. Smot.</i>
Radovi	<i>Radovi</i>
Stočarstvo	<i>Stočarstvo</i>
Yearbook of the Faculty of Agriculture and Forestry. University of Skoplje	<i>Yearb. Fac. Agric. For. Skoplje</i>
Zaštita Bilja	<i>Zaštita Bilja</i>
Zbornik Radova Poljoprivrednog Fakulteta	<i>Zborn. Rad. Poljopr. Fakul.</i>

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In the sun-soaked lands of the Rhodesias, maize is a staple food. It is also a favourite target of the voracious army worm—caterpillar of the moth *Laphygma eximpta*. The army worm, so called because of its vast numbers, appears suddenly, unexpectedly and devastatingly. It comes like a thief in the night and in a few short hours can destroy every young and promising plant in its path . . . pasture, forage grass or cereal. For generations, when the army worm struck, hunger came close.

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FIELD CROP ABSTRACTS

VOL. 10, No. 1, 1957

CONTENTS

REVIEW ARTICLE : Wild Oats.	BY C. V. Dadd.	...	...	...	...	PAGE 1
FIELD CROPS (ANNUAL)	PAGES					PAGES
Cereals	11	LAND USE, SURVEYS and MANAGEMENT				53
Wheat		FARMING SYSTEMS and PRACTICES				54
Oats		SOIL and WATER CONSERVATION				56
Rye		WEEDS, WEED CONTROL and WEEDKILLERS				57
Barley		CROP BOTANY				59
Maize		MISCELLANEOUS				61
Sweet-corn		REPORTS				63
Rice		BOOKS				71
General		NEWS ITEMS and NOTES				74
Legumes	33	INDEX OF AUTHORS				xvii
Soyabeans						
Groundnuts						
Peas						
Beans						
Roots	35					
Sugar-beet						
Fodder-beet						
Potatoes						
Sweet-potatoes						
Fibre Crops	47					
Cotton						
Flax						
Oil Crops	51					
Rape						

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